

IN THE CLAIMS:

Please amend the claims as follows:

1. (Original) A differential amplifier comprising:

first and second input terminals to which a differential signal composed of first and second signals is inputted;

first and second level shift circuits for shifting respective voltages of the first and second signals inputted to the first and second input terminals;

a first differential couple and a first current source for converting the differential signal level-shifted by the first and second level shift circuits to currents;

a second differential couple and a second current source for converting the differential signal inputted to the first and second input terminals to currents;

a third current source and a reference voltage source;

a comparator for comparing the voltage of the first or second signal inputted to the first or second input terminal with a voltage of the reference voltage source;

a switch circuit for selectively supplying a current from the third current source to the first or second current source depending on a result of the comparison by the comparator; and

first and second output terminals to which an output of the first differential couple and an output of the second differential couple are connected commonly.

2. (Original) The differential amplifier of claim 1, further comprising:

third and fourth level shift circuits for shifting the respective voltages of the first and second signals inputted to the first and second input terminals, wherein

the second differential couple and the second current source convert the differential signal level-shifted by the third and fourth level shift circuits to currents instead of the differential signal inputted to the first and second input terminals.

3-7. (Cancelled)

8. (Currently amended) The differential amplifier of claim 1, ~~2, 3, 4, 5, 6, or 7~~, wherein the comparator and the switch circuit comprise:

a first transistor having a gate for receiving the first or second signal inputted to the first or second input terminal; and

a second transistor having a gate to which the reference voltage source is connected and the first and second transistors have respective one terminals connected commonly to the third current source and the respective other terminals connected to the first and second current sources.

9. (Currently amended) An operational amplifier comprising:

the differential amplifier as recited in claim 1 ~~[[,]] or 2, 3, 4, 5, 6, or 7~~; and

a current synthesis and amplification circuit for synthesizing and amplifying current outputs of the differential amplifier.